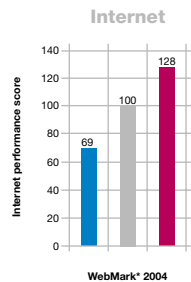
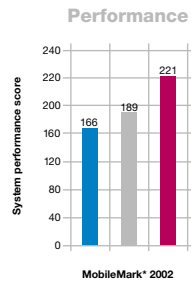


## Measuring mobile experience.



■ Mobile Intel® Pentium® 4 Processor - M 2.60 GHz (previous generation)  
 ■ Intel® Centrino™ mobile technology - Intel® Pentium® M processor 1.70 GHz  
 ■ Intel Centrino mobile technology - Intel Pentium M processor 755 - 90nm, 2MB cache, 2 GHz, 400MHz FSB

Performance tests and ratings are measured using specific computer systems and/or components and reflect the approximate performance of Intel products as measured by those tests. Any difference in system hardware or software configuration, as well as system use patterns including wireless connectivity, may affect actual test results and ratings. For more information on performance tests and on the performance of Intel products, visit [www.intel.com/performance/resources/limits.htm](http://www.intel.com/performance/resources/limits.htm)

## Intel Centrino mobile technology delivers what your customers want.

### Large business

Large businesses want high-ROI enterprise solutions. Intel® Centrino™ mobile technology gives them:

- Integrated WLAN capability and outstanding mobile performance, while enabling extended battery life, for enhanced productivity and efficiency both in and out of the office\*
- Support for a wide range of industry wireless LAN security standards and leading third party solutions<sup>§</sup>
- Integrated, stable platform (12+ months image stability), for reduced TCO

### Small business

Small businesses want a competitive edge. Intel Centrino mobile technology gives them:

- Advanced features to enable outstanding mobile performance and extended battery life to work where and when they need to\*
- Ability to gain productivity, flexibility and cost benefits of WLAN technology, along with Intel quality and brand promise\*
- Support for a range of industry-standard wireless security solutions, enabling safer notebook connectivity<sup>§</sup>

### Consumer

Consumers want lifestyle flexibility. Intel Centrino mobile technology gives them:

- Outstanding mobile performance while enabling extended battery life for entertainment, communication and managing a busy life on the go\*
- Integrated WLAN capability for freedom to work, study and play without plugging in, at home or at public hotspots\*
- Sleek, easy-to-carry notebook PCs and choice of innovative new designs

### Learn more about Intel Centrino mobile technology:

**Large business:** [intel.com/ebusiness/mobile](http://intel.com/ebusiness/mobile)  
**Small and medium business:** [intel.com/smallbusiness/mobile](http://intel.com/smallbusiness/mobile)  
**Consumer:** [intel.com/home/notebooks](http://intel.com/home/notebooks)

\* Wireless connectivity and some features may require you to purchase additional software, services or external hardware. Availability of public wireless LAN access points limited and some hotspots may not support Linux-based Intel Centrino mobile technology systems. System performance measured by MobileMark\* 2002. System performance, battery life, wireless performance and functionality will vary depending on your specific operating system, hardware and software configurations. See [http://www.intel.com/products/centrino/more\\_info](http://www.intel.com/products/centrino/more_info) for more information.

™ Dual band WLAN supports low band capabilities (5.15 GHz to 5.35 GHz) only. Low band capabilities are not supported in all countries. Check with your PC manufacturer for details on availability.

‡ AES has specific operating system requirements, and requires both access point support and a PC software upgrade that will be available in 2H'04. Available on 802.11 b/g only. Check with your PC manufacturer for availability.

§ Some security solutions may not be supported by your PC's operating system and/or by your PC manufacturer. Check with your PC manufacturer for details on availability.

◇ Intel® PROSet for Wireless software may not be supported by your PC's operating system and/or by your PC manufacturer. Check with your PC manufacturer for details on availability.

Δ WME support requires a WME enabled access point and requires a PC software upgrade that will be available in 2H'04. Available on 802.11 b/g only and may have varying operating system requirements. Check with your PC manufacturer for details on availability.

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Bluetooth is a trademark owned by its proprietor and used by Intel Corporation under license.

\*Other names and brands may be claimed as the property of others.

0504/ESWL/PA/PP/10K 251992-005

Quick reference pocket guide

**Intel® Centrino™ mobile technology.**  
**Breakthrough technology for high-performance mobility.**



**MOBILE TECHNOLOGY**

**intel®**

## Intel® Centrino™ mobile technology key benefits.

### Breakthrough mobile performance\*

- 90nm and strained silicon process technologies enable higher performance and allow more frequency head room
- 2 MB power optimized L2 cache, enhanced register access manager and enhanced data pre-fetcher increase performance
- Power optimized 400 MHz system bus, micro-ops fusion and dedicated stack manager allow for faster execution of instructions at lower power
- Advanced instruction prediction enables fewer re-dos, for increased performance
- Support for up to 2 GB of DDR memory enables higher memory speed
- Second-generation Streaming SIMD Extensions improves performance and allows SW compatibility with previous Intel® microprocessor generation
- Intel® 855GME chipset with Intel® Extreme Graphics 2 technology delivers realistic 3D graphics with sharp images and enables balanced memory usage between graphics and system for optimal performance
- USB 2.0 support enables data transfer rate up to 40 times faster than USB 1.1 for better performance
- Support for Wireless Multi-media Extensions (WME) for dual-mode 802.11b/g provides quality of service support for advanced usage models such as Voice over IP, check PC manufacturer for availability<sup>4</sup>

### Enables extended battery life\*

- Support for Enhanced Intel SpeedStep® technology with multiple voltage and frequency operating points allows for better match of performance to application demand
- Microprocessor power-efficient transistor technology optimizes power consumption/dissipation, for lower CPU average power, and focuses system power where CPU needs it, shutting down anything not being used
- Intel® 855 chipset family power-conserving feature enables CPU and/or memory activation or power-down when needed, lowering chipset power consumption
- Intel® 855GME chipset supports Intel® Display Power Saving Technology, reducing display backlight power by up to 25% with minimal visual impact to end user, depending on Intel® DPST settings and system use
- Intel PRO/Wireless network connection power saving features such as Intel® Intelligent Scanning Technology and Power Save Protocol (PSP) allow for multiple power settings enabling customized power vs. performance choices when in battery mode and reduce power consumption by controlling frequency of scanning for access points

### Integrated wireless LAN capability\*

- Integrated Wi-Fi CERTIFIED® single band 802.11b, single band/dual mode 802.11b/g and dual band 802.11a/b wireless LAN capability to connect to Wi-Fi CERTIFIED access points™

- Industry standard wireless LAN security support (such as 802.1x, WEP, WPA, AES<sup>2</sup>) available<sup>5</sup> allowing enhanced wireless LAN security in compliance with evolving industry standards\*
- Cisco® Compatible Extensions (such as LEAP and CKIP) support available, which enables interoperability with Cisco Aironet® wireless LAN infrastructure<sup>5</sup>
- Intel® PROSet software with advanced profile management available, which allows multiple profile set-up and automatic switching between profiles for simplified wireless access when moving between access points<sup>5</sup>
- Support for Intel® Wireless Coexistence System, which enables reduced interference between the Intel® PRO/- Wireless network connection family and certain Bluetooth® devices

### Thinner, lighter designs

- Support for Intel® Mobile Voltage Positioning (Intel® MVP IV), which dynamically lowers voltage based on processor activity to lower thermal design power, enabling smaller notebooks
- Innovative FCBGA and FCBGA packaging technology optimized for a range of thinner, lighter designs, including <1" thick, that deliver outstanding performance\*
- Optional Intel® 855GM chipset's integrated low voltage differential signal (LVDS) interface enables higher integration, consuming less motherboard space and allowing smaller notebook designs

## Intel® Centrino™ mobile technology... More than a processor.

Intel® microprocessors	Mobile Intel® Pentium® 4 Processor - M	Intel® Pentium® M Processor	Intel Pentium M Processor
Processor number	NA	NA	7xx sequence of numbers <sup>1</sup>
90nm process technology	No	No	Yes
On-die L2 cache	512 KB	1 MB	2 MB
Processor system bus	400 MHz	400 MHz	400 MHz
Processor frequency up to	2.60 GHz	1.70 GHz	2 GHz
Micro-ops Fusion	No	Yes	Yes
Support for Enhanced Intel SpeedStep® technology	No <sup>2</sup>	Yes	Yes
Support for Intel® Mobile Voltage Positioning IV (Intel® MVP)	No	Yes	Yes
Intel® chipsets	Intel® 845 chipset family	Intel® 855 chipset family	Intel 855 chipset family
Support for up to 2 GB of memory	No	Yes	Yes
USB 2.0 support	No <sup>3</sup>	Yes	Yes
Discrete and integrated graphics solutions	No <sup>3</sup>	Yes	Yes
Supports Intel® Display Power Saving Technology and Intel® Dual-Frequency Graphics Technology	No	Yes <sup>4</sup>	Yes <sup>4</sup>
Dynamic I/O buffer disabling for processor system bus and memory	No	Yes	Yes
Intel® wireless solution		Intel® PRO/Wireless Network Connection	Intel PRO/Wireless Network Connection
Single band 802.11b, single band/dual mode 802.11b/g and dual band 802.11a/b Wi-Fi CERTIFIED® wireless LAN support™	Intel® wireless components may be included in these systems and certain wireless features may be available, however Intel does not conduct the same validation as with the Intel® Centrino™ mobile technology components.	Yes	Yes
Industry standard wireless LAN security support (802.1x, WEP, WPA, AES <sup>2</sup> ) available <sup>5</sup>		Yes	Yes
Cisco® Compatible Extensions (such as LEAP and CKIP) support available <sup>5</sup>		Yes	Yes
Intel® PROSet available with advanced profile management <sup>5</sup>		Yes	Yes

1 See [http://www.intel.com/products/processor\\_number](http://www.intel.com/products/processor_number) for more information.

2 Mobile Intel® Pentium® 4 Processor - M has support for Enhanced Intel SpeedStep® technology without multiple voltage and frequency operating points.

3 Available with Intel® 852GM chipset, an additional chipset option for Mobile Intel® Pentium® 4 Processor - M.

4 Available with Intel® 855GME chipsets only.